



Crop Biolife

CropBioLife makes it possible for farmers to produce healthier crops and regenerate soil by replacing toxic treatments with its patented and certified organic flavonoid product.

Better health for plants & people – its only natural!



The challenge



Consumer passion is **"NO TOXIC CHEMICALS" & "NO GMO"**
Synthetic farming chemicals **damage the soil** and **produce less nutritional food**
Arable land is shrinking while the **population expands**
Climate stress on crops is unprecedented

How does a farmer meet the
demand for tox free nutritional foods?

The solution



CropBioLife is focused on building **plant energy** to manage stress

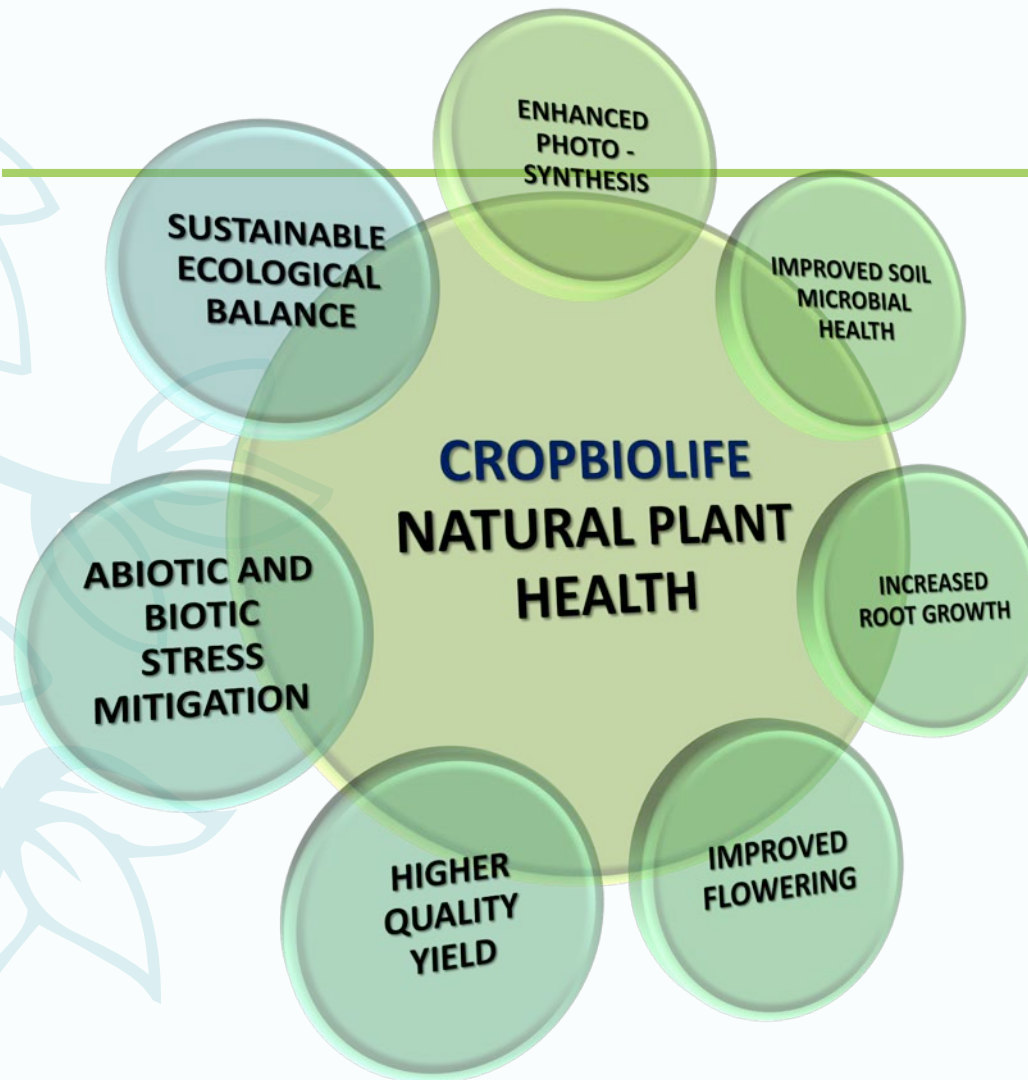
Sustainability comes from **regenerating soil health** and retaining it

Crops grown with CBL have **higher nutritional value** for humans

CropBioLife = natural plant health

- CropBioLife is an activated bioflavonoid botanical foliar spray
 - Proven over 10 years on 5 continents
- *Activated Bioflavonoids delivered to the leaf improve the plants own phenolic production in the plant.*
- *Phenolic compounds are responsible for all key plant functions for health, growth and vitality.*
- Safe and Natural
 - Certified for organic production (Australia, New Zealand, South Africa, Chile, USA, Canada & Philippines)

Bioflavonoids at work



Food production Influencing Factors

- Climate Stress
- Ripeness timing
- Growth cycle
- Disease Stress
- Soil moisture
- Nutrient availability
- Soil health

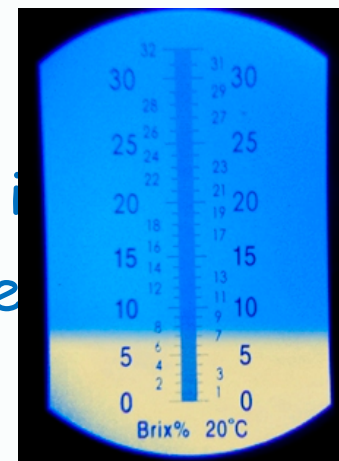
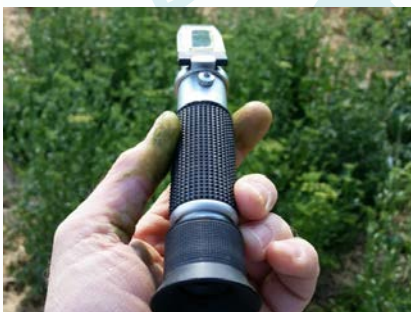
CropBioLife by way of improving secondary metabolism mitigates the impact of factors effecting the performance of a crop.



Importance of High Leaf Brix

- Major indicator of photosynthesis and soluble solids therefore a measure of **plant health** and nutrition.
- **Frost tolerance** as sugars have lower freezing point.
- **More glucose** to feed soil microbes who provide plant available nutrition and CO² in return.
- **Insects don't feed** on high brix leaves
- **Fungi can't grow** on high brix leaves

The device to measure brix is
inexpensive and easy to use

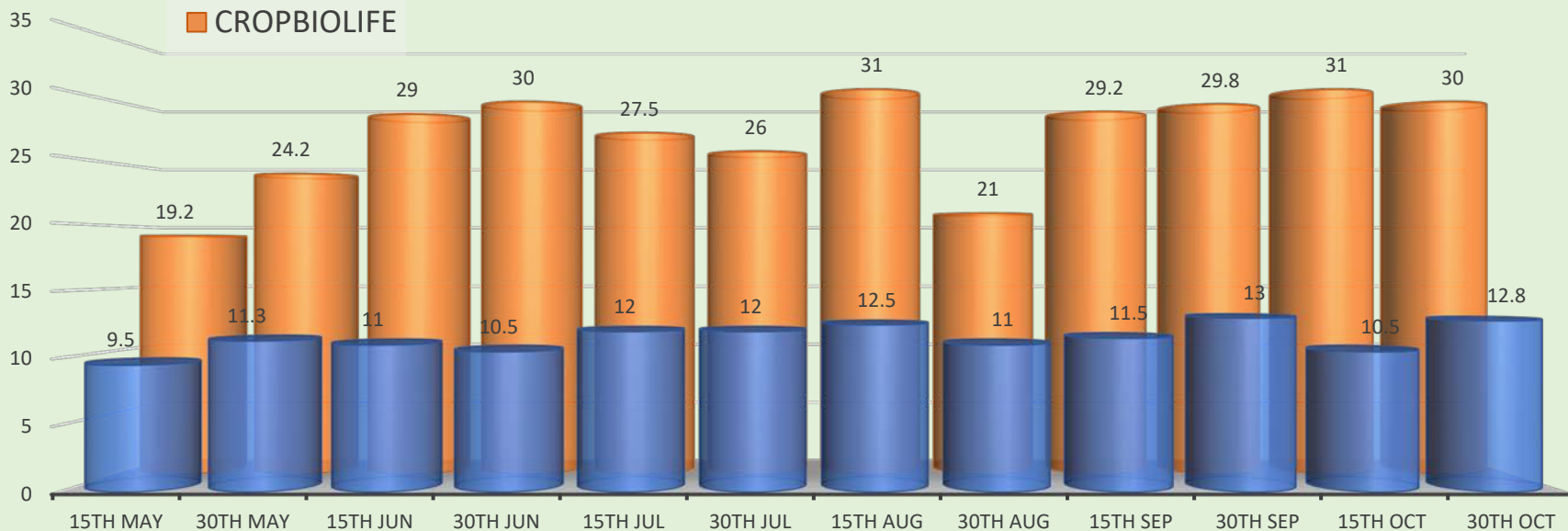




Brix as a measure of plant health

■ CONTROL
■ CROPBIO LIFE

LEAF BRIX MALBEC TRIAL 2018 NAPA VALLEY

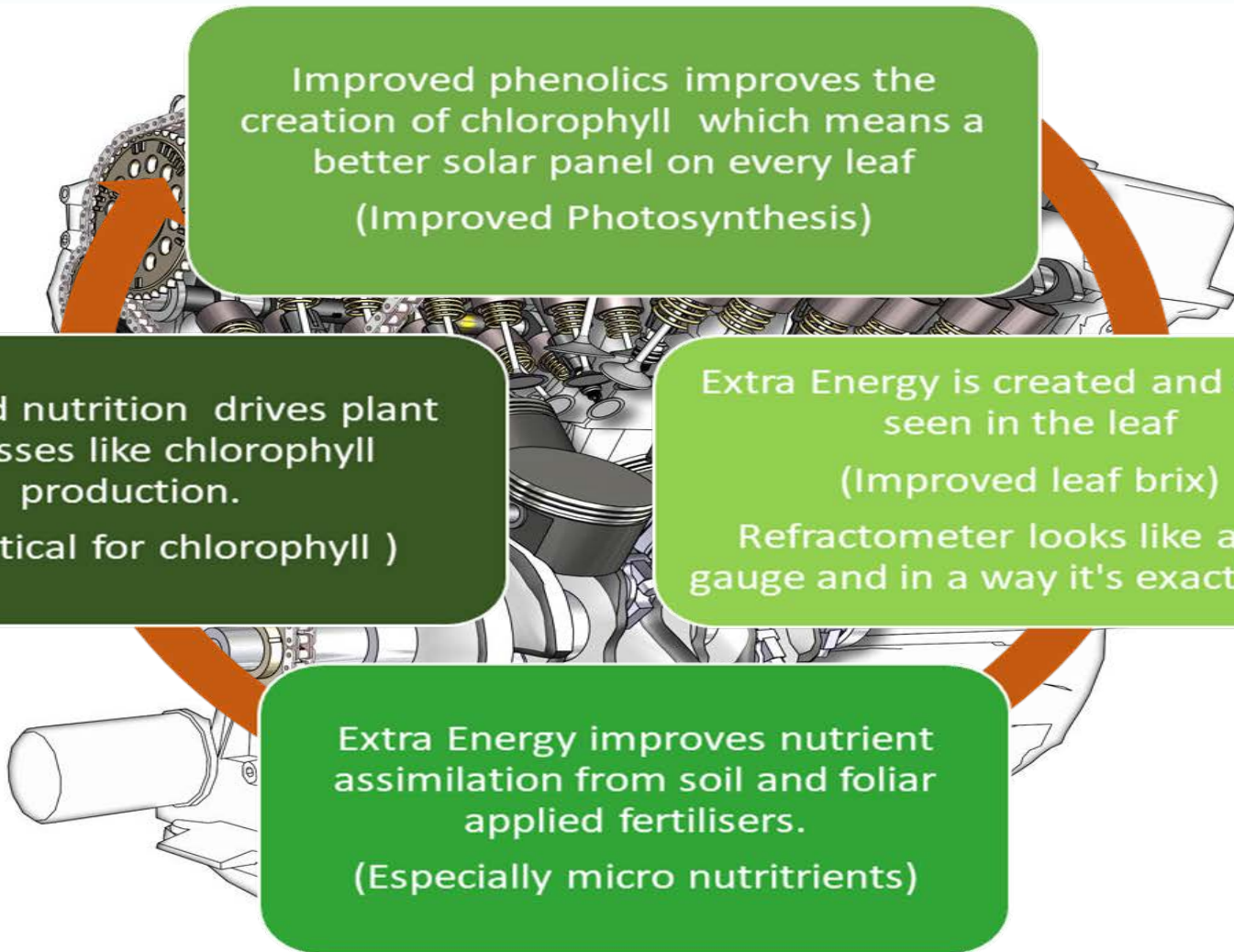


ETS
LABORATORIES

LABORATORY
REPORT
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CropBioLife kickstarts the engine



Improved phenolics improves the creation of chlorophyll which means a better solar panel on every leaf
(Improved Photosynthesis)

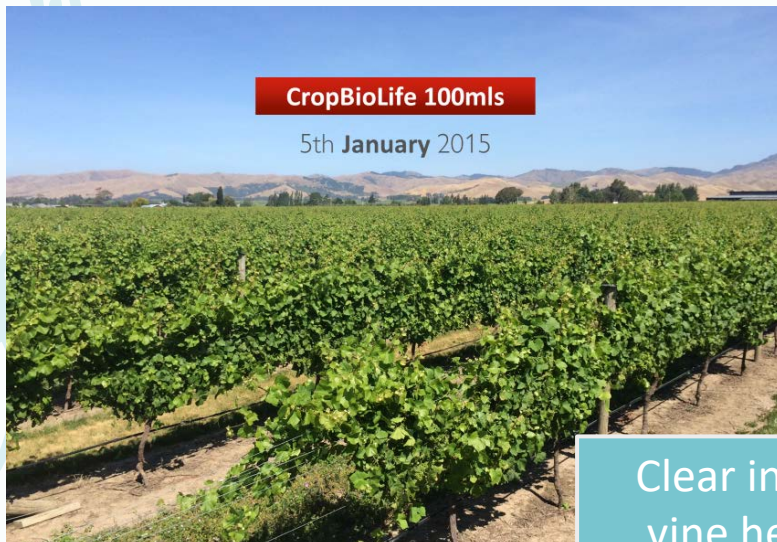
Improved nutrition drives plant processes like chlorophyll production.
(Mg critical for chlorophyll)

Extra Energy is created and can be seen in the leaf
(Improved leaf brix)
Refractometer looks like a fuel gauge and in a way it's exactly that.

Extra Energy improves nutrient assimilation from soil and foliar applied fertilisers.
(Especially micro nutrients)



New Zealand Trial



Clear indication of
vine health same
vineyard same day.
Trial vs Control

Improved mineral & micronutrient availability



Same block, same nutrient program. Deficiency apparent in rows not sprayed with CropBioLife. Difference is better soil microbe activity



Canopy ... Hot and Dry

Heat stress has caused the plant to shut down. Note the Leaf colour and drooping away from the sun

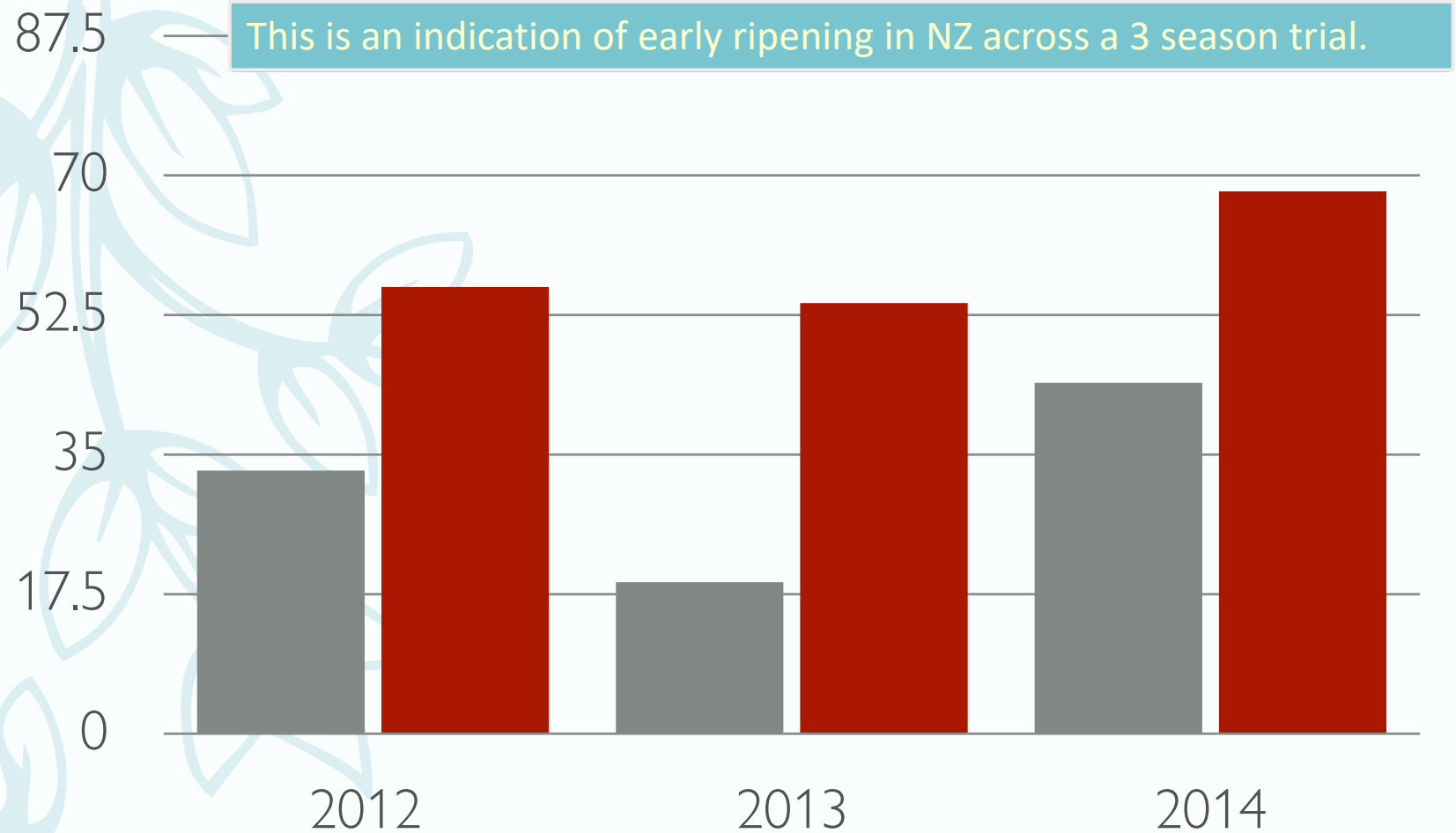


Improved energy contributes to resistance to cold and heat stress



Same Vineyard Same day
Note the Leaves are greener
and sitting more upright.
Photosynthesis is still
occurring.

% difference in ripe bunches-Pinot Noir NZ
(Average 250 bunch count)

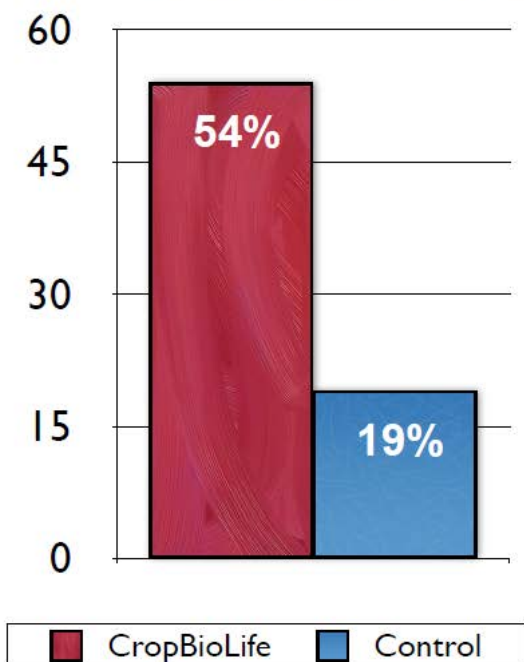


Marlborough Region NZ

Observations at start of Veraison....
CropBioLife treated blocks vs **Control** blocks

Observations Measured within Trial and Control Blocks amongst replicate Panels

35% increase in colour/ripening



Demonstrates the improved ripening effect of CropBioLife treated vines.



Increased Phenolic compounds

Report from Australian wine grape lab showing CropBioLife treatment improvement over control

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LABORATORY REPORT NUMBER: A1303174

Aussan Laboratories
Unit 4/185 Briens Road
Northmead NSW 2152
Phone: 0417202850

Purchase Order
Sample(s) Received: 27/03/2013
Report Type: Final
Issue Preferences: greg@aussan.com.au

Sample Number	Sample Details	Result	Unit
A1303174/01	Shiraz CropBioLife Treat	2.4	Brix
		3.78	g/L
		22.4	g/L
Test		3.7	mg/bery
*Malic Acid (W04)		2.53	mg/g
*pH (W05)		1.32	AU/bery
*Soluble Solids (W07)		1.83	AU/g
*Titratable Acidity pH 8.20 (W09)		0.95	mg/L
Anthocyanins (W35)		1.40	
Anthocyanins (W35)			
Tannin (epicatechin eq.)			
Total Phenolics (W35)			
Total Phenolics (W35)			
Yeast Assimilable Nitrogen (W29)			

Change Control C5

Sample Number: A1303174/02

Test

*Malic Acid (W04)

*pH (W05)

*Soluble Solids (W07)

*Titratable Acidity pH 8.20 (W09)

Anthocyanins (W35)

Anthocyanins (W35)

Tannin (epicatechin eq.)

Total Phenolics (W35)

Total Phenolics (W35)

Yeast Assimilable Nitrogen (W29)

Steve Byrne
Approved Signatory
Vintessential Laboratories

The above results relate only to the samples received.

Accreditation
Site No. 11580
This document is issued
accreditation requirements.
ISO1

*Indicates determination by NATA accredited method.

NATA

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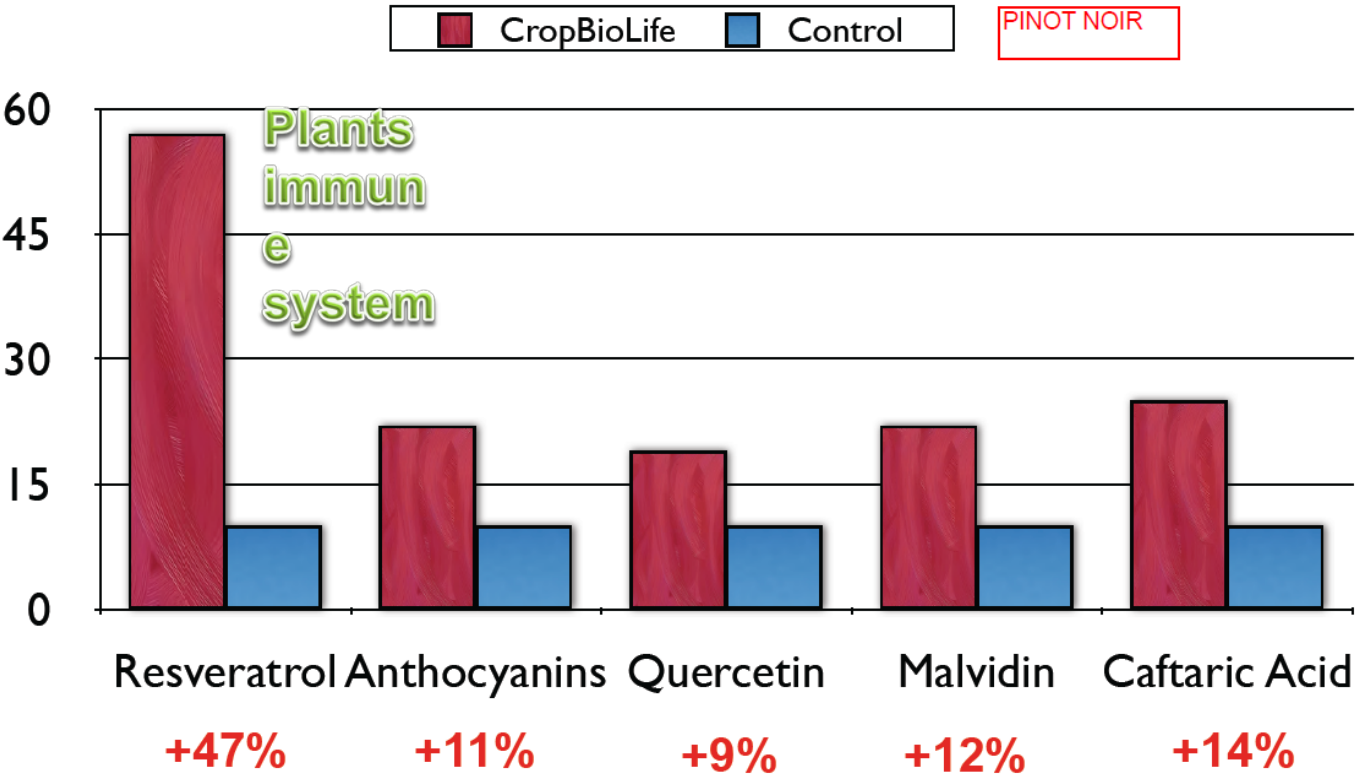
Soluble Solids (W07)		22.4	g/L
*Titratable Acidity pH 8.20 (W09)		3.7	g/L
Anthocyanins (W35)	+9.5%	2.53	mg/bery
Anthocyanins (W35)		1.32	mg/g
Tannin (epicatechin eq.)	+24%	3.63	mg/g
Total Phenolics (W35)	+20%	1.83	AU/bery
Total Phenolics (W35)		0.95	AU/g
Yeast Assimilable Nitrogen (W29)	+40%	1.40	mg/L



Lab result showing improved polyphenols

Polyphenolic analysis - University of Auckland - Wine Sciences Laboratory

Post ferment - Percentage over control of important polyphenolic compounds





Soil Food Web test

Data from lab analysis of soil
microbials in four CropBioLife trials

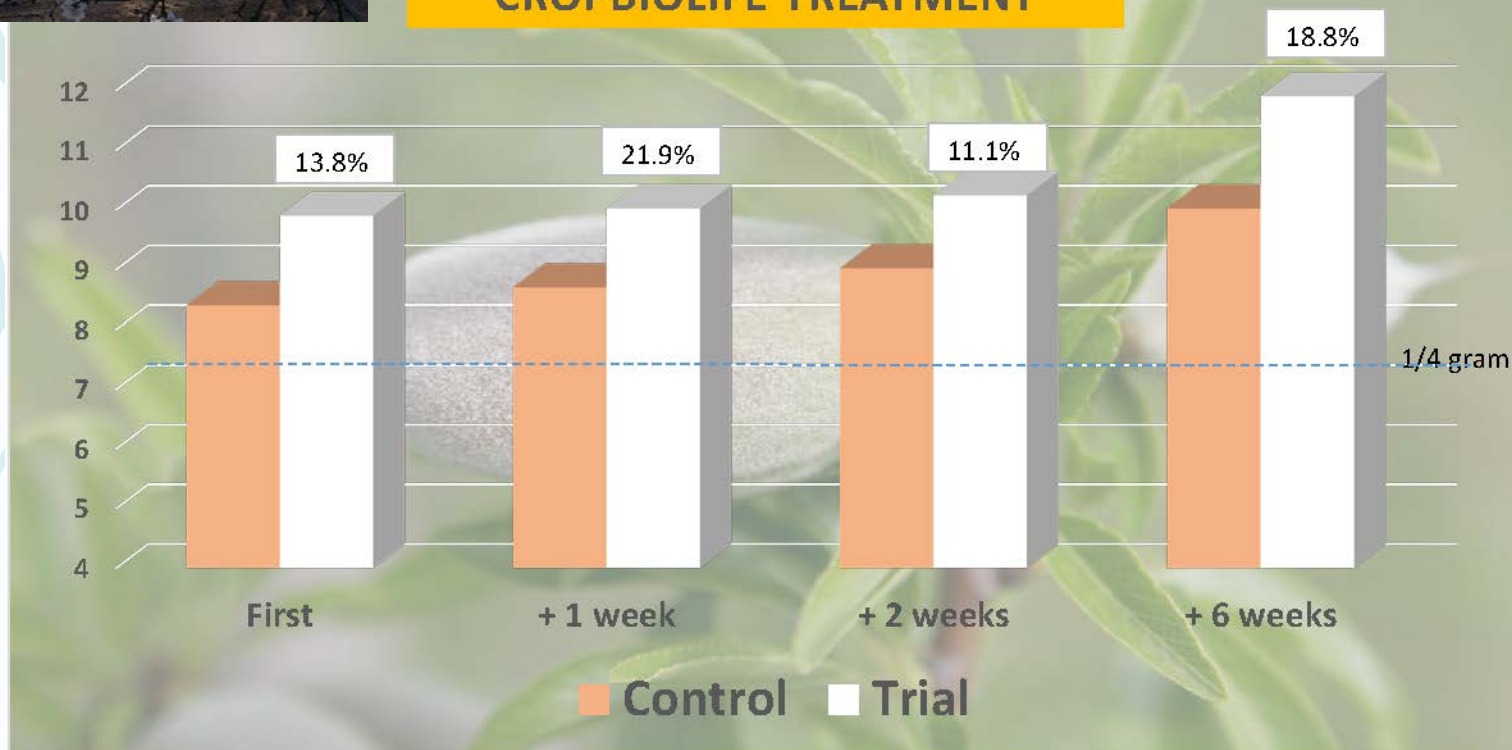
ACTIVE FUNGI ug/g			
TYPE	Control	Trial	% Change
Shiraz	117	279	138%
Shiraz (2)	2.78	6.3	127%
Shiraz (5)	2.07	12.5	504%
Pinot	.95	6.86	622%

These little
guys are
Needed for
**PLANT
AVAILABLE
NUTRITION**

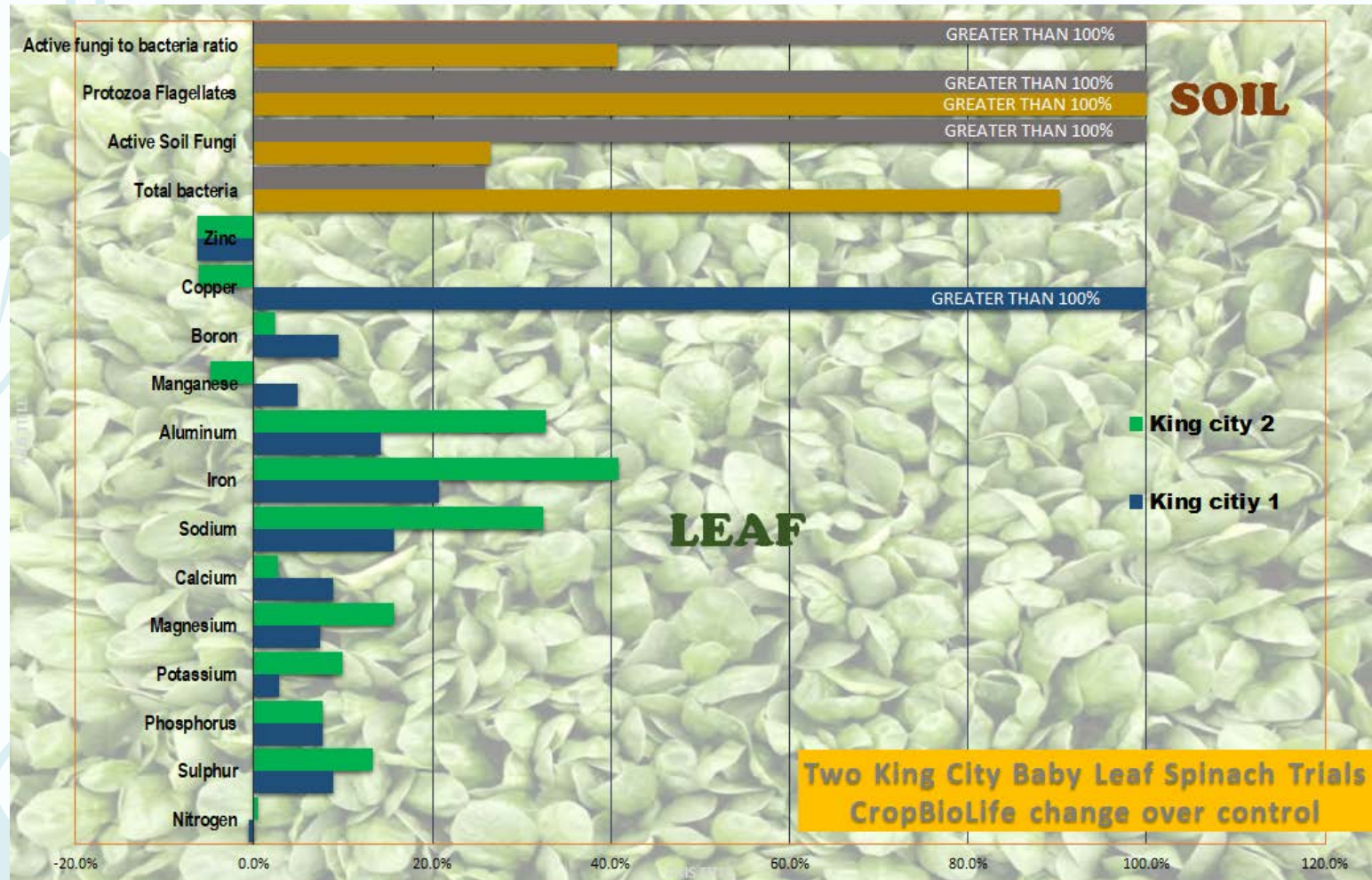
Almonds



ALMOND NUT WEIGHT INCREASE CROPBIO LIFE TREATMENT

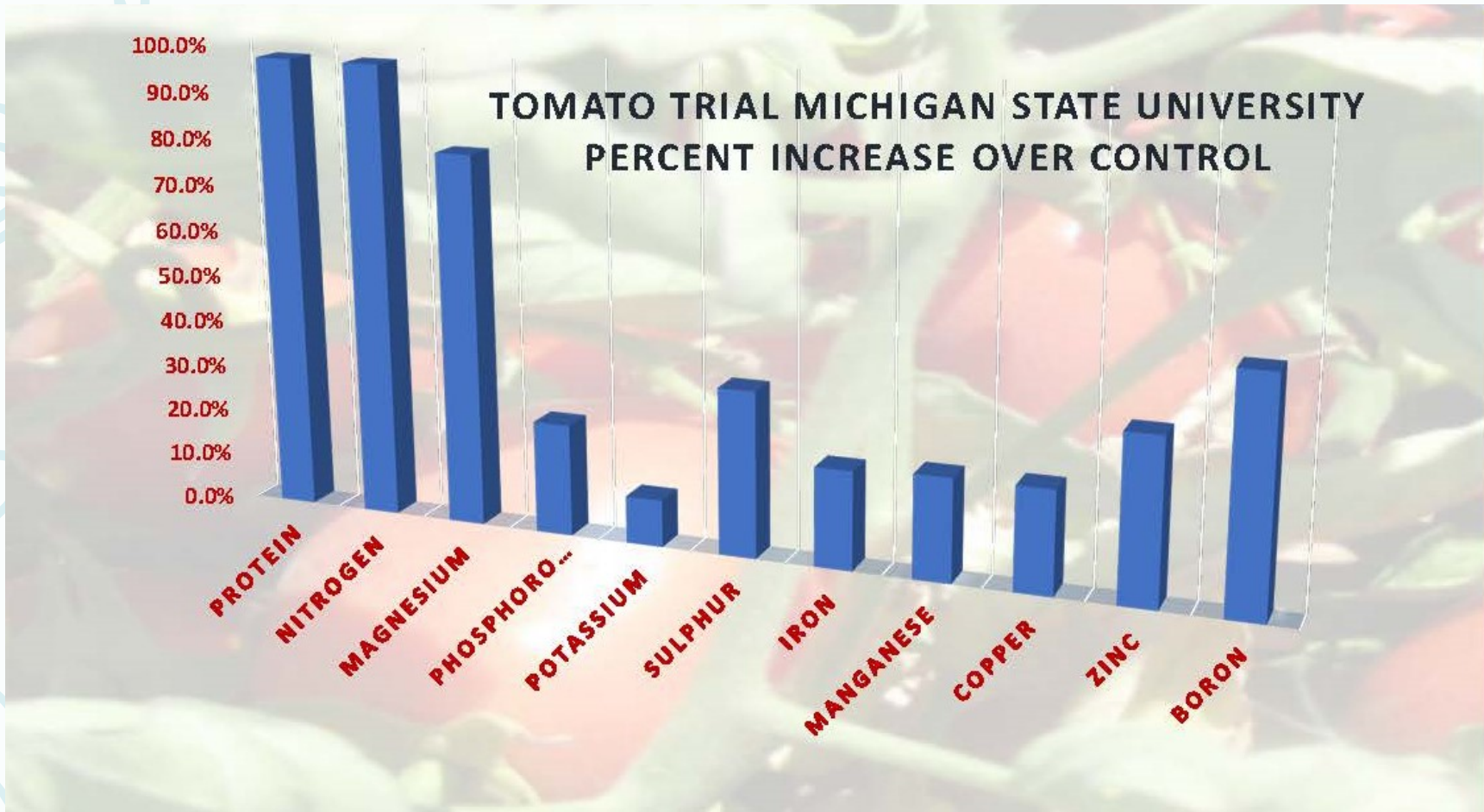


Spinach



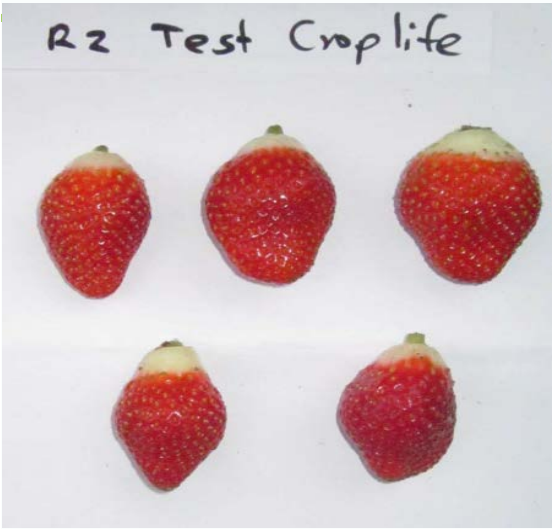
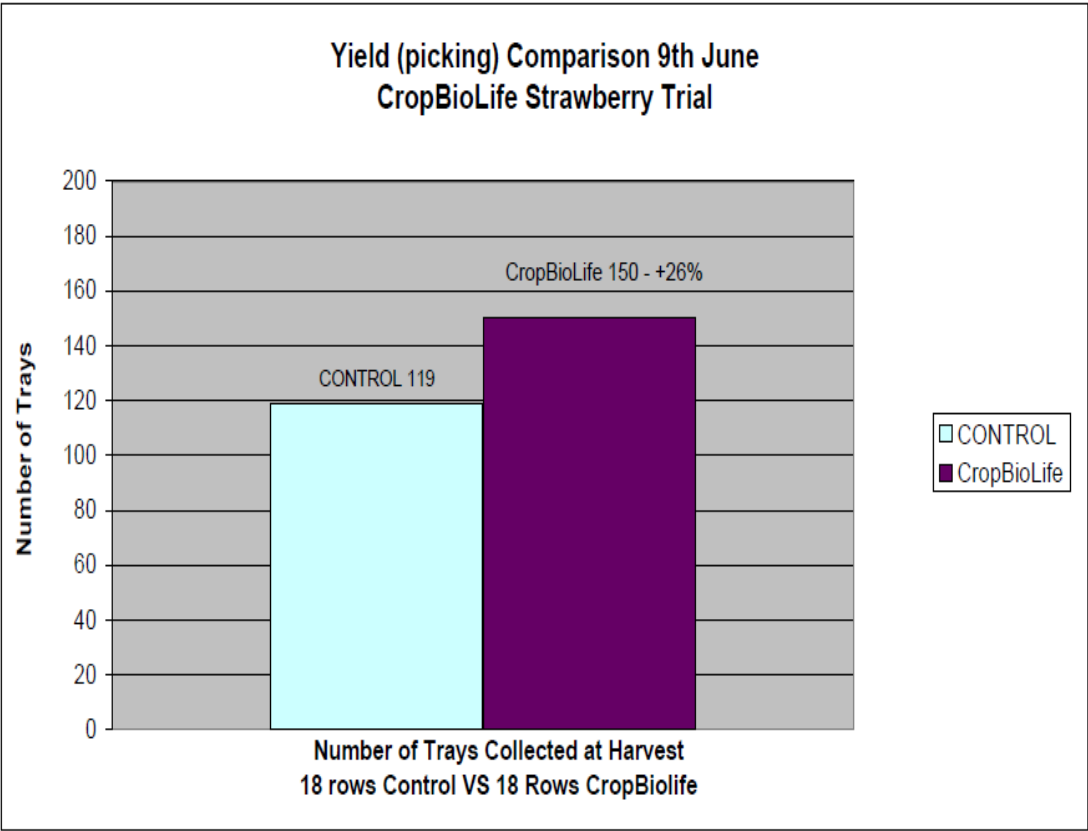


Tomato nutrient value





Australian strawberry trial



California Strawberry trial

CropBioLife Trial

(note more berries)



Control

RESULTS: 2 sprays, San Andreas variety. (info. from spray & field supervisors)

- larger & more fruit
- firmer fruit (Costco – shelf life)
- better color
- healthier plants
- Brix 22% higher (11 versus 9)
- “BEST BLOCK IN THE FIELD”



Actual Photos Salinas Ca. Farms 2 Aug. 2013

Citrus results

Untreated



25% on Crop



Cropbiolife



86.6% on Crop



Citrus fruit size

Clementine's



UNTREATED

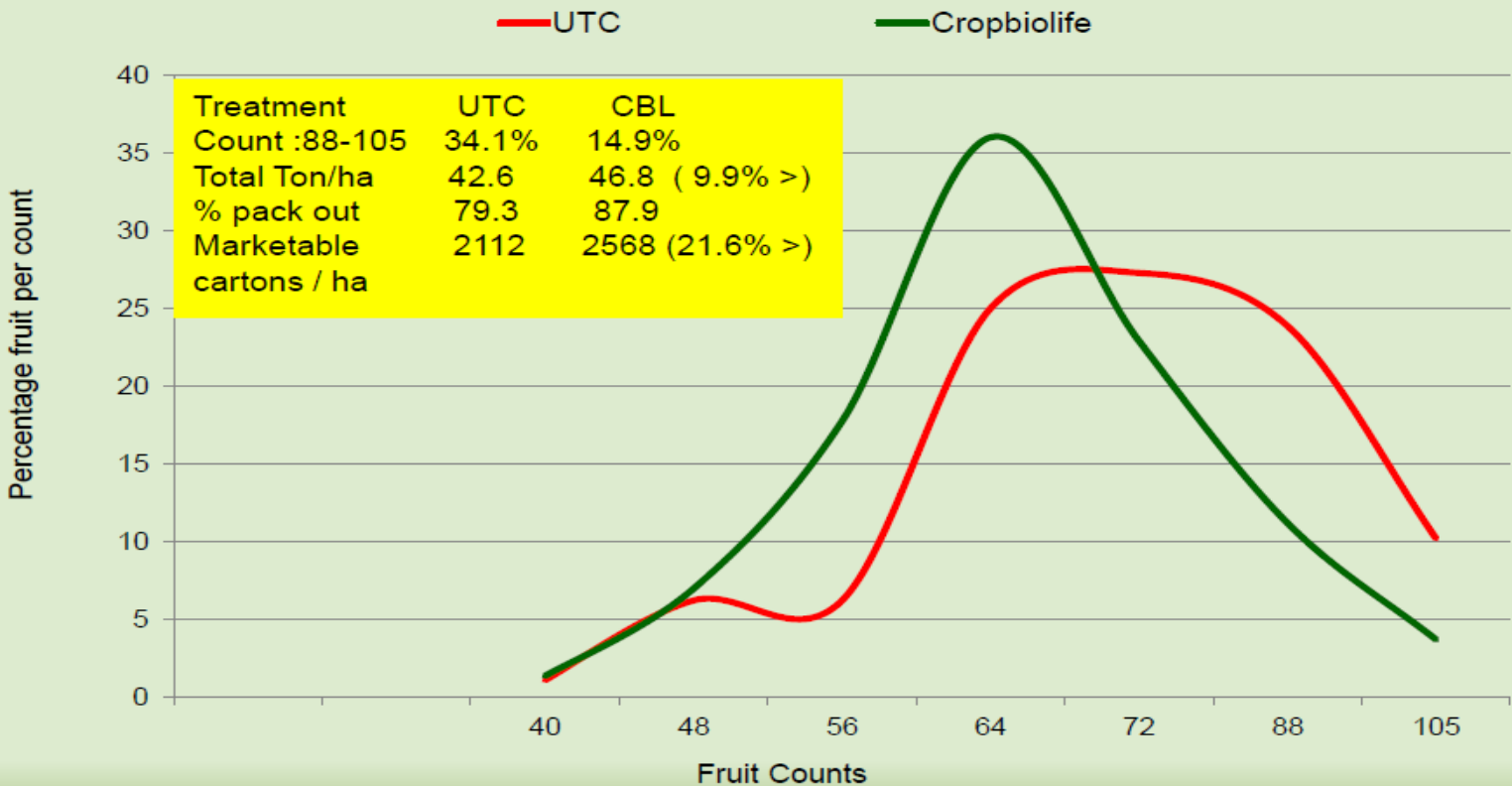


CROPBIOLIFE
7.7% increase in fruit
size
More advanced
colour



Citrus packout

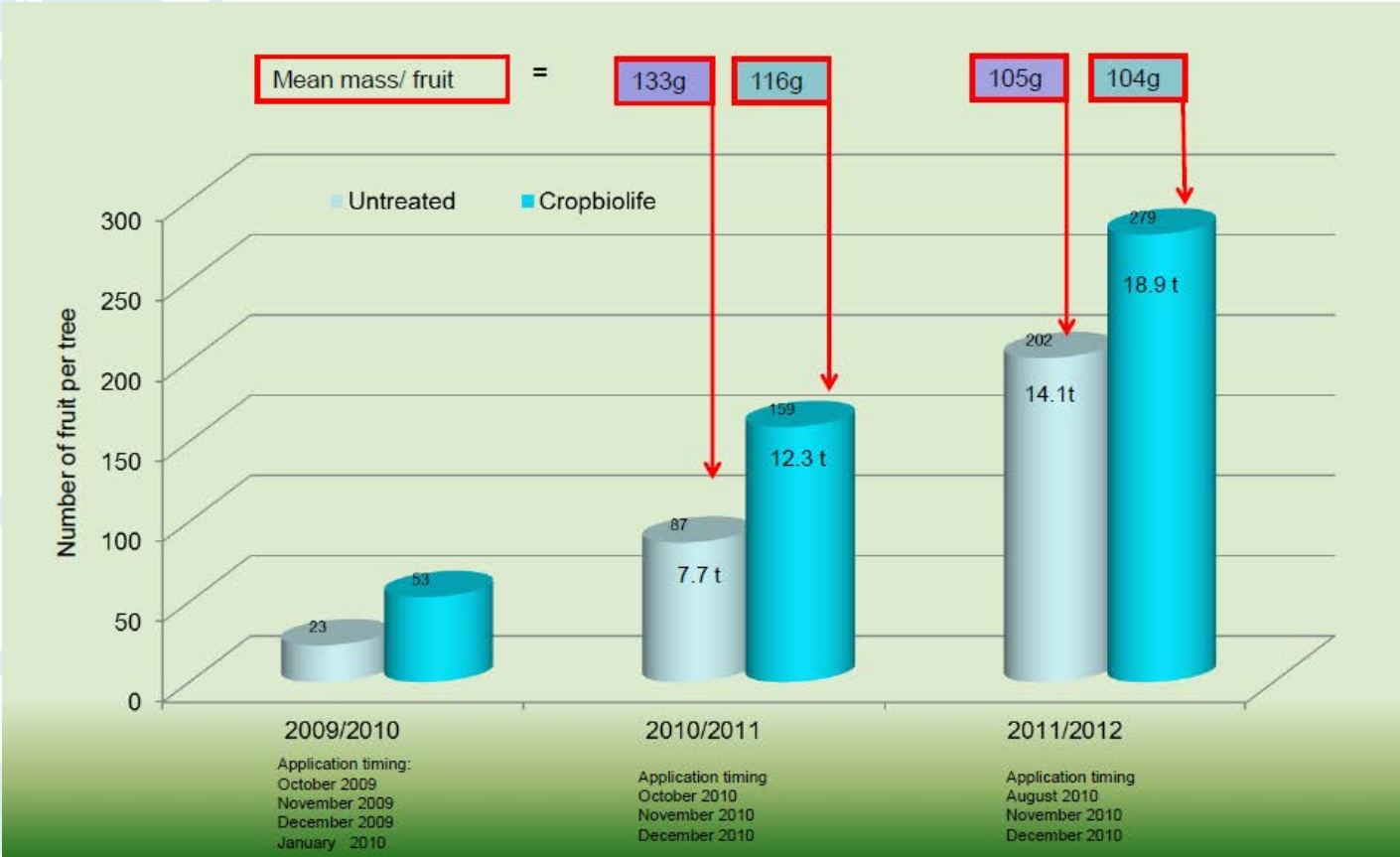
Cropbiolife on fruit size Delta Valencia Weipe Farms, Limpopo 2011-12



Cropbiolife 3 x 500ml/ha

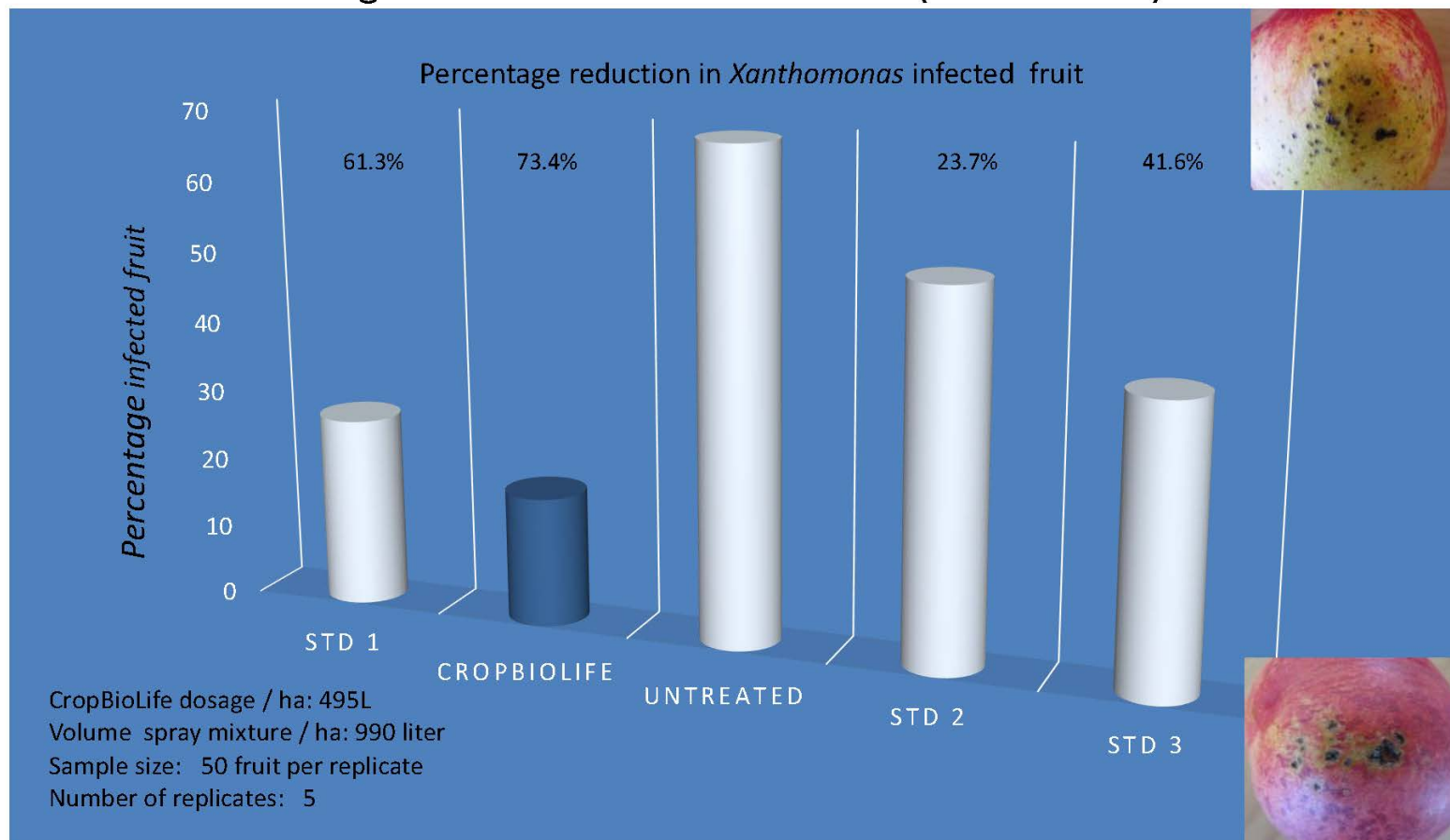


Effect on young Citrus development



Effect of energy on disease

Cropbiolife and competitors against bacterial spot (*Xanthomonas pruni*) on August Red nectarines at harvest (South Africa)



Simple Equation

CropBioLife

= Improved plant Phenolics

Improved plant Phenolics

= Healthier plants

Healthier plants

= Higher Value



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